

a resistance layer on the dielectric substance and comprising a polycrystalline layer of a material selected from the group consisting of SiC, SiGe and SiGeC.

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4. (New) The resistor of claim 3, wherein the resistance layer is doped with boron.

5. (New) The resistor of claim 3, wherein the substrate contains an element selected from the group consisting of carbon and germanium.

6. (New) The resistor of claim 3, wherein the resistance layer is embedded in the dielectric substance.

7. (New) A method of fabricating an integrated high-ohmic polycrystalline silicon, comprising the steps of:

providing a substrate;
precipitating a dielectric substance on the substrate;
precipitating on the dielectric substance a layer of material selected from the group consisting of SiC, SiGe, and SiGeC;
further precipitating the dielectric substance over the layer; and
providing metallic contacts on the layer.

8. (New) The method of claim 7, wherein the layer is polycrystalline.

9. (New) The method of claim 7, wherein the layer is amorphous.

10. (New) The method of claim 7, wherein the layer is doped with boron.